

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/509,196A

Input Set : A:\1871-121.app

DATE: 11/13/2000 TIME: 13:25:59 ENTERED

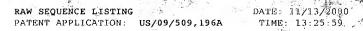
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 3 <110> APPLICANT: DALY, Roger J.
        SUTHERLAND, Robert L.
 6 <120> TITLE OF INVENTION: A Potential Effector for the Grb7 Family of Signalling
        Proteins
 9 <130> FILE REFERENCE: 1871-129
11 <140> CURRENT APPLICATION NUMBER: 09/509,196A
12 <141> CURRENT FILING DATE: 2000-03-23
14 <150> PRIOR APPLICATION NUMBER: P09388
15 <151> PRIOR FILING DATE: 1997-09-23
17 <150> PRIOR APPLICATION NUMBER: PCT AU98/00795
18 <151> PRIOR FILING DATE: 1998-09-23
20 <160> NUMBER OF SEQ ID NOS: 2
22 <170> SOFTWARE: Patentin Ver. 2.1
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 3400
26 <212> TYPE: DNA
27 <213> ORGANISM: Homo sapiens
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32 attaaaggaa agattgatgt tigcatigig cigitacago aiggagoiga gocaaccaic 180
33 cgaaatacag atggaaggac agcattggat ttagcagatc catctgccaa agcagtgctt 240
34 actggtgaat ataagaaaga tgaactotta gaaagtgoca ggagtggcaa tgaagaaaaa 300
35 atgatggete tacteacace attaaatgte aactgecaeg caagtgatgg cagaaagtea 360
36 actocattae attitggeage aggatataac agagtaaaga tigtacaget gitacitgeaa 420
37 catggacgtg atgtccatgc taaagataaa ggtgatetgg taccattaca caatgcetgt 480
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39 atggacttgt ggcaattcac tectetteat gaggeagett etaagaacag ggttgaagta 600
40 tgttctcttc tcttaagtta tggtgcagac ccaacactgc tcaattgtaa gaataaaagt 660
41 getatagaet tggeteecae accaeagtta aaagaaagat tageatatga atttaaagge 720
42 cactegities tigcaageties acgagaaget gatittacte gaatcaaaaa acatetetet 780
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44 geateteeat ateeeaaaag aaageaaata tytgaactyt tyetaagaaa aggageaaac 900
45 atcaatgaaa agactaaaga attettgact cetetgeacg tggcatetga gaaageteat 960
46 aatgatgtty ttgaagtagt ggtgaaacat gaagcaaagg ttaatgetet ggataatett 1020
47 ggtcagaett etetacacag agetgeatat tgtggtcate tacaaacetg eegeetacte 1080
48 ctgagetatg ggtgtgatee taacattata teeetteagg getttactge tttaeagatg 1140
49 gganatgaaa atgtacagca actootooaa gagggtatot cattaggtaa ttoagaggoa 1200
50 gacagacaat tgctggaagc tgcaaaggct ggagatgtcg aaactgtaaa aaaactgtgt 1260
51 actifiticaga gigicaleti cagagacatt galaggeete agicilacace acticatiti 1320
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53 catgetaaag ataaaggagg cettgtaeet tigeacaatg catgitetta eggacatiat 1440
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55 tittacacett tacatgaage ageageaaaa ggaaaatatg aaatitgeaa aettetgete 1560
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Output Set: N:\CRF3\11132000\1509196A.raw

											. *				
119 Tyr 120	Asn 130	Arg	Val	Lys	11e	Val. 135	Gl'n	Leu	Leu	Leu	Gln 140	His	Gly	Arg	Asp
122 Val		A l.a	Lys	Asp			Asp	Leu	Val			His	Asn	Ala	
123 145					1.50					155					160
125 Ser 126	'l'y r	GIŢ	His	Tyr 165	GLu	val	Thr	GLu	170	Leu	val	Lys	HIS	175	GTA
128 Cys	Val.	Asn	Ala	Met	Asp	Leu	Trp	Gl n	Phe	Th.r	Pro	Leu.	Hi.s	Glu	Al a
129			1.80					185					190		
131 Ala 132	ser	Lys 195	Asn	Arg	Val		Val 200	Cys	Ser	Leu	Leu	Leu 205	Ser	Tyr	Gly
134 Ala	Asp		Thr	Leu	Leu	Asn		Lvs	Asn	LZS	Ser		Ile	Asp	Leu
135	210					2:1.5					220				
137 Ala	Pro	Thr	Pro	G l.n		ГÃ2	Glu	Arg	Leu		туг	Glu	-Phe	Lys	
138 225		_			230		_			235			_	- 1	240
140 His	ser	Leu	Leu	G1n 245	Ala	Ala	Arg	GLu	A1a 250	Asp	Val.	Thr	Arg	255	Lys
143 Lys	His	Leu	Ser		Glu	Mest	Va l	Asn		[.t/g	His	Pro	Gln		His
144	11113	Licu	260	БСи	Olu	ricc	147	265		L , 5	1113		270	1.31.1.	11.1.5
146 Glu	Thr	Ala		Ris	Cvs	Ala	Ala				Tyr			Ara	LVS
147		275			- 3		280				- 2 -	285			-7-
149 Gln	lle	Cys	Glu	Leu	Leu	Leu	Arg	Lys	Gl.y	Ala	Asn	He	Asn	Glu	Lys
150	290					295			11		300				
152 Thr	Lys	G1u	Phe	Leu	Thr	Pro	Leu	His	Val.	Ala	Ser	$\cdot \mathtt{Glu}$	Lys	A.l.a	His
153 305					310				4	315					320
155 Asn	Asp	Val	Val			Val.	Val	Lys.	His	Glu	Ala	Lys	۷a]	Asn	Ala
156				325				47	330			*4		335	
158 Leu	Asp	Asn		Gly	Gln	Thr	Ser		His			Ala			Gly
159z.		-5	340					345					350		
161 His	Leu		Thr	Cys	Arg	Leu		Leu	ser	Тух	Gly		Asp	Pro	Asn
162	~ 1 .	355			· · · ·	T3 1	360		-	0.1		365		a1	.
164_11e	370	ser	Leu	GII	GTÅ	275	Thr	ALa	ren	GIn	380	CTĀ	ASh	GIH	ASII
		Cln	Lon	Tou	Cln		Clu	T10	Cor	Lou		Aan	205	Clu	A 1 a
167 Val. 168 385	GIH	GLH	ьеи	neu	390	GIU	G.L.Y	ire	Ser.	395	G.L.Y	ASII	ser	GIU	400
170 Asp	Ara	GIn	Leu	T.e.u		Δla	Δla	1.70	Δla		Aen	Val	Glu	Th r	
171	9	OAH	250.0	405	014	1110	11.1 4	Lys	410	G.L.J	1156	, u i	010	415	vu.
173 Lys	Lvs	Leu	Cvs		Val	Gln	Ser	Val		Cvs	Arq	Asp	Ile		GLV
174	2		420					425		-1-			430		
176 Arg	Gln	ser	Thr	Pro	Leu	His	Phe		Ala	G1.7	Tyr	Asn	Arg	Val.	Ser
177		435					440			•	•	445			
179 Val	Val.	G.l.u	Tyr	Leu	Leu	Gln	His	Gly	Al.a	Asp	Val.	His	A.la	Lys	Asp
1.80	450					455					460				
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183 465					470				ė.	475					480
185 Gl.u	Va.l.	Ala	Glu		Leu	Va l.	Lys	His		Ala	Va L	Val	Asn		A.l a
186				485					490	7				495	
188 Asp	Leu	Trp		Phe	Thr	Pro	Leu		Glu	Ala	Ala	Ala		Gly	Lys
1,89		~ 1 ·	500		- 7	_	i.	505					510		
191 Tyr	GIU	1.T.G	Cys	nys	Lеи	Leu	ren	GIN	HJ.S	СΤУ	Ala	ASP	Pro	Thr	rλa

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197	Thr	Asp	Ile	Gln	Asp	Leu	Leu	Arg	Gly	Asp	Ala	Ala	Leu	Leu	Asp	Al a
198	545					550					555					560
200	Ala	Lys	Lys	Gly	Cys	Leu	Ala	Arg	Va l.	Lys	Lys	Leu	Ser	Ser	Pro	Asp
201					565					570					575	
203	Asn	Va 1.	Asn	Cys	Arg	Asp	Thr	Gln	Gly	Arg	$_{ m His}$	Ser	Thr	P.ro	Leu	H.i.s
204				580					585					590		
206	Leu	Ala	Ala	Gly	Tyr	Asn	Asn	Leu	Glu	Val	Ala	Glu	Tyr	Leu	Leu	Gln
207			595					600					605			
209	His	Gly	Ala	Asp	Val	Asn	Ala	Gln	Asp	Lys	Gly	G 1. 7	Leu	ıle	Pro	Leu
210		610					61.5					620				
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213	625					630					635					640
215	Lys	Тут	Asn	Ala	ser	Leu	Asn	Ala	Thr	Asp	Lys	Trp	Ala	Phe	Thr	Pro
216					645					650					655	
218	Leu	His	Glu	Ala	Ala	Gln	Lys	$GT\lambda$	Arg	Thr	Gln	Leu	Cys	Ala	Leu	Leu
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222			675					680					685			
	Pro		Asp	Len	Va.l	Ser		Asp	Asp	Val	Ser		ren	Leu	Thr	Ala
225		690					695					700				
		Met	Pro	Pro	ser		Leu	Pro	Ser	-	-	Lys	Pro	Gln	Val	
228	705					710					715				_	720
	Asn	G I. y	۷aı	Arg		P.ro	GTÄ	Ala	Thr		Asp	Ala	Leu	Ser		GLY
231	_			_	725	_		_	- 1	730				_	735	_
	Pro	ser	ser		ser	ser	ren	ser		Ala	ser	ser	ren	λsp	ASI	ren
234		C1	(1	740		a1	* *		745	1/- 1	G = 1	G	G	750	01	ml
	ser	GLY		Рпе	ser	G.LU	ьeu		ser	Val	val	ser		Ser	СΙУ	THE
237	clu	Clar	755	cor	Cor	Lau	C111	760	Tura	Clu	Va I	Dro	765	172.1	Aun	Dho
240	GLU	770	ита	3e1	ser	r.eu	775	цуя	ьγъ	G.LU	Val	780	Grà	Val	изр	Pile
	cor		mb se	Cln	pho	Val		Acn	t ou	(2) 57	1.00		uio	Leu	Mot	A CD
243		11.6	1111	GIII	FIIC	790	ALG	ASII	ьен	иту	795	Gru	плъ	Lieu	Merc	800
		Dho	Glu	Arσ	c1n		Tla	Thr	T.Q11	λen		Lan	Val	Glu	Mot	
246	1.15	rne	Giu	нту	805	GIII	116	1111.	DG U	810	val	Leu	A CI T	010	815	GLY
	nie	Live	Glu	Lan		Glu	Tlo	Clv	TIA		Ala	mv.r	(:1 v	His		ніс
249	11.1.5	n'i n	GIU	820	ыјз	O.La	110	011	825	rigii	nra	1. Y I	CIL	830	111 9	1113
	LVS	Leu	Tie		GTV	Val	Glu	Ara		He	Ser	cly	C1 n	Gln	Glv	Len
252			835	270	0.27		020	840	200	3.10	., ., .	o x j	845	.,.,,	0+1	200
	Asn	Pro		Len	Thr	Len	Asn	-	Ser	Gly	Ser	Glv		Ile	Len	Tle
255		850	₂	23.50		15 6. 6	855	2. 12.2.		 2		860			no u	
	Asp		Ser	Pro	Asp	Asp		Glu	Phe	Gln	Ser		Glu	Glu	Glu	Met
258	865					870					875					880
		ser	Thr	Val	Ara		His	Arq	Asp	Gly		His	Ala	Gly	Gly	
261					885			,		890	4	_			895	
263	Phe	Asn	Arg	Тух	Asn	Il.e	Leu	Lys	Ile		Lys	Val.	Cys	Asn	Lys	Lys
264			-	900				-	905				-	910	-	•

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266 Leu Trp Glu Arg Tyr Thr His Arg Arg Lys Glu Val Ser Glu Glu Asn 267 91.5 920 925 269 His Asn His Ala Asn Glu Arg Met Leu Phe His Gly Ser Pro Phe Val 270 930 935 940 272 Asn Ala Ile Ile His Lys Gly Phe Asp Glu Arg His Ala Tyr Ile Gly 273 945 . 950 955 960 960 275 Gly Met Phe Gly Ala Gly Ile Tyr Phe Ala Glu Asn Ser Ser Lys Ser 276 965 970 975 278 Asn Gln Tyr Val Tyr Gly Ile Gly Gly Gly Thr Gly Cys Pro Val His 279 980 985 990 281 Lys Asp Arg Ser Cys Tyr Ile Cys His Arg Gln Leu Leu Phe Cys Arg 282 995 1000 1005 284 Val Thr Leu Gly Lys Ser Phe Leu Gln Phe Ser Ala Met Lys Met Ala 285 1010 1015 1020 287 His Ser Pro Pro Gly His His Ser Val Thr Gly Arg Pro Ser Val Asn 288 1025 1030 1035 1040 290 Gly Leu Ala Leu Ala Glu Tyr Val Ile Tyr Arg Gly Glu Glu Ala Tyr 291 \$1045\$ 1050 1055293 Pro Glu Tyr Leu Ile Thr Tyr Gln Ile Met Arg Pro Glu Gly Met Val 294 1060 1065 1070 296 Asp Gly

VERIFICATION SUMMARY

DATE: 11/13/2000 TIME: 13:26:00

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